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EXAMINER

FUBARA, BLESSING M

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| ART UNIT | PAPER NUMBER |
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1618

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/070,758
Filing Date: March 12, 2002
Appellant(s): WITTELER ET AL.

Daniel S. Kim
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08/12/2004.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 2-9 and 12 stand or fall together with claim 1 and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Denzinger et al. (US 4,402,937).

Denzinger discloses a process for preparing polyvinylpyrrolidone (PVP)-iodine by reacting the PVP with elemental iodine in the presence of formic acid, oxalic acid, or ammonium salt or amide of carbonic acid, formic acid or oxalic acid and the reaction is carried out in aqueous solution (abstract and column 3, lines 1 and 2). The preparation starts with an aqueous solution of PVP of from 10-60% (column 4, lines 33-37), the PVP has a K value of from 8-50 (column 3, lines 37-41). In example 1, iodine is in an amount of 6% based on the weight of PVP and an available amount of 4.1%. The available iodine in example 2 is 5.1% and 6.2% in example 3. The mixture of the PVP and iodine and formic acid is heated at 70 °C for 20 hours (example 1), at 80 °C for 5 hours (example 2) and at 75 °C for 2 hours and a solid product is isolated from the aqueous solution by drying, spray drying or spray granulation (column 4, lines 53-56). See also claims 1-3. Instant claim 12 is a composition claim and future intended use is not critical in a composition claim. Formic acid is a reducing agent of the instant claims. The examples are exemplifications illustrating some aspects of the disclosed process and do not cover

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all possible combinations of the range of K-values of PVP solutions and the concentrations of the PVP-solution. Denzinger meets the limitations of the instant claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denzinger et al. (US 4,402,937).

The prior art reference is discussed above. The prior art reference discloses PVP K-values of from 8 to 50 and these values are within the range claimed by applicants. The prior art discloses that the PVP-iodine solution prepared is about 50% higher in stability than that of the PVP-iodine solutions that have been previously prepared according to the previous state of the prior art (column 4, lines 44-48). The prior art fails to exemplify the claimed relationship. A review of the records does not establish relationship of the starting concentration of the PVP and reaction time for the preparation of the PVP-iodine on the stability of the PVP-iodine in aqueous

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solution. It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a PVP-iodine solution according to the process of Denzinger where the PVP-iodine solution is more stable than the PVP-iodine solution prepared as per the state of the prior art. One having ordinary skill in the art would have been motivated to optimize the starting concentration of the PVP by routine experimentation that would be expected to produce a PVP-iodine solution that is at least 50% higher in stability than that of the state of the prior art.

(11) Response to Argument

The prior art is clearly interested in stability and storage of the PVP-iodine solution and there is no degree of stability in the claims. It is obvious to adjust the concentration of the initial/starting concentration of the PVP to improve stability. Column 4, lines 44-48 of Denzinger discloses that “the stability of the novel PVP-iodine solutions is about 50% higher than that of solutions obtained by dissolving a PVP-iodine prepared according to German Published Application DAS No. 2,818,767,” and this is an improvement over the prior art. No comparison with Denzinger is provided to demonstrate that applicants’ PVP-iodine solution is more stable. No unexpected results are provided in the establishment of relationship between the PVP starting concentration and the K-values. Applicants’ improved stability is neither reflected in the scope of the claims nor evidenced in any of the data currently submitted.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

BF

June 19, 2005

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